

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) A long term oxygen therapy system comprising:

an oxygen supply;

at least one conduit having a first end connected to the oxygen supply and a second end being configured to pass directly through the thoracic wall and lung of a patient thereby establishing fluid communication between the oxygen supply and the inner volume of the lung, the second end of the conduit being positioned in the lung tissue; and

a sealing device connected to the at least one conduit, the sealing device being configured to provide a fluid tight seal between the at least one conduit and the thoracic wall.

Claim 2 (Currently Amended) A long term oxygen therapy system comprising:

an oxygen supply;

a valve;

a first conduit having a first end connected to the oxygen supply and a second end connected to the valve;

at least one second conduit having a first end connected to the valve and a second end having multiple branches, one of the branches being configured to pass directly through the thoracic wall and lung of a patient thereby establishing fluid communication between the oxygen supply, the inner volume of the lung and the bronchus and the inner volume of the lung, the one of the branches having an open end positioned in the lung tissue, another of the branches configured to pass through a bronchus thereby establishing fluid communication between the oxygen supply and the bronchus; and

sealing devices connected to the multiple branches, the sealing devices being configured to provide a fluid tight seal between the one of the branches passing through the thoracic wall and lung of the patient and the thoracic wall and a fluid tight seal between the other of the branches being configured to pass through a bronchus of the patient and the thoracic wall of the patient.

Claim 3 (Withdrawn) A method for treating hypoxemic patients having chronic obstructive pulmonary disease, the method comprising:

creating an anastomotic opening extending from the thoracic wall and into the inner volume of a lung;

supplying oxygen from a source directly into alveolar tissue of a lung through a conduit extending from the oxygen source and into the lung through the anastomotic opening; and

establishing a fluid tight seal between the anastomotic opening and the conduit.

Claim 4 (Withdrawn) A method for treating hypoxemic patients having chronic obstructive pulmonary disease, the method comprising:

creating an anastomotic opening extending from the thoracic wall and into the inner volume of a lung;

supplying oxygen from a source directly into alveolar tissue of a lung through a conduit extending from the oxygen source and into the lung through the anastomotic opening;

establishing a fluid tight seal between the anastomotic opening and the conduit; and

venting air from the lung into the bronchus through a second conduit.